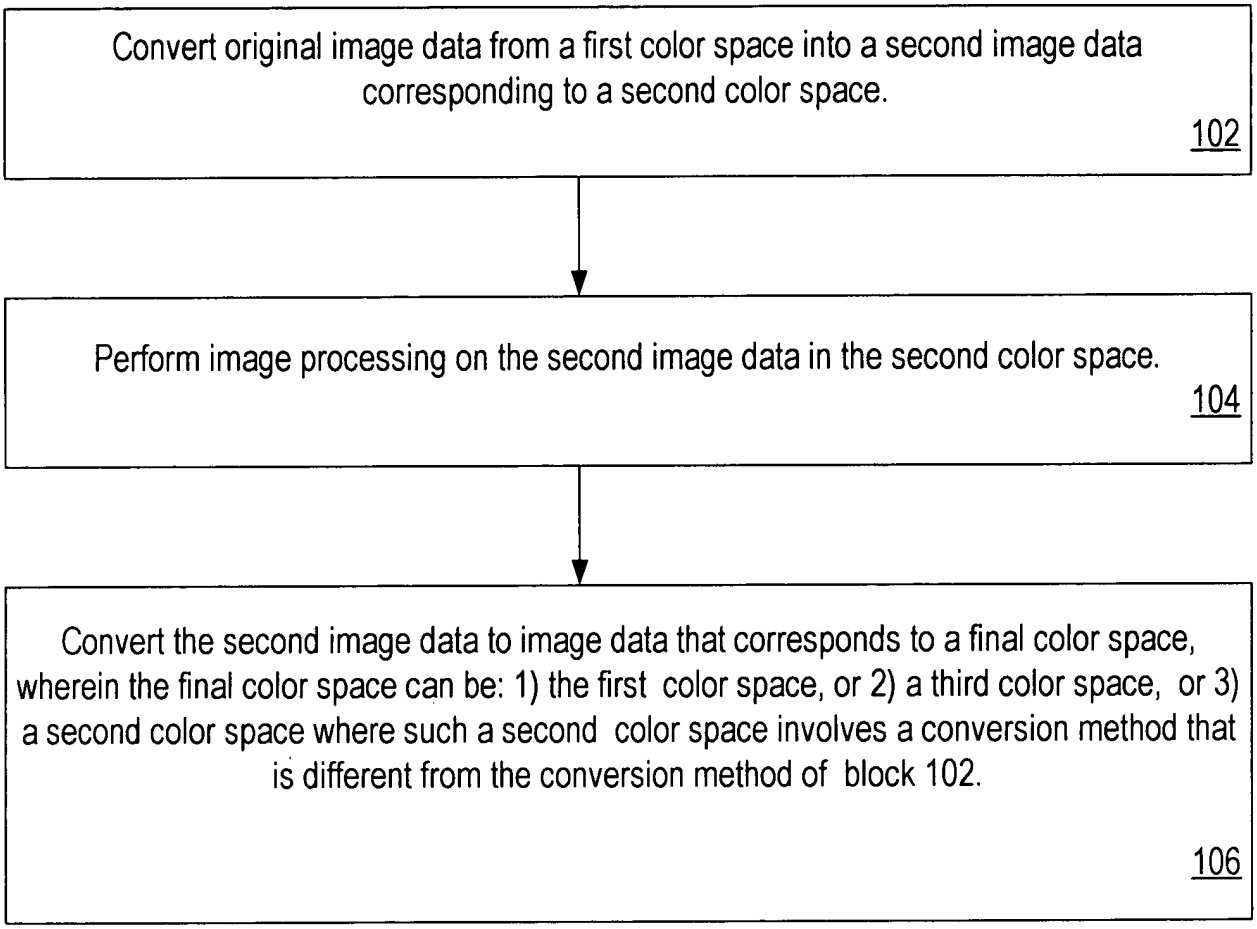
Convert original image data from a first color space into a second image data corresponding to a second color space.
102
Perform image processing on the second image data in the second color space.
104
Convert the second image data to image data that corresponds to a final color space, wherein the final color space can be: 1) the first color space, or 2) a third color space, or 3) a second color space where such a second color space involves a conversion method that is different from the conversion method of block 102.
106

FIG. 1A

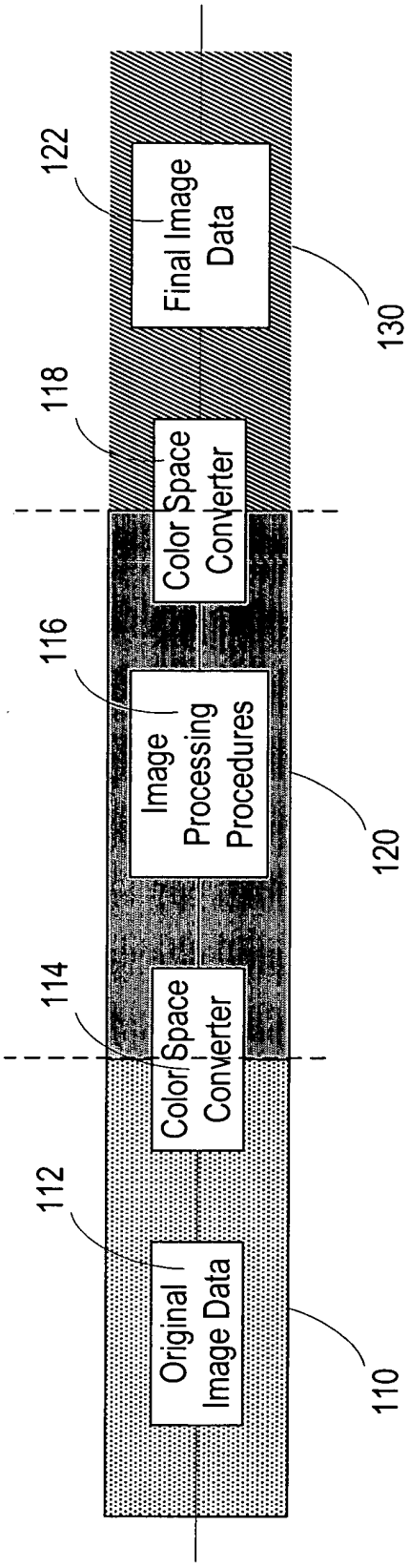
122
Final Image Data
130
118
Color Space Converter
116
Image Processing Procedures
120
114
Color Space Converter
112
Original Image Data
110

FIG. 1B

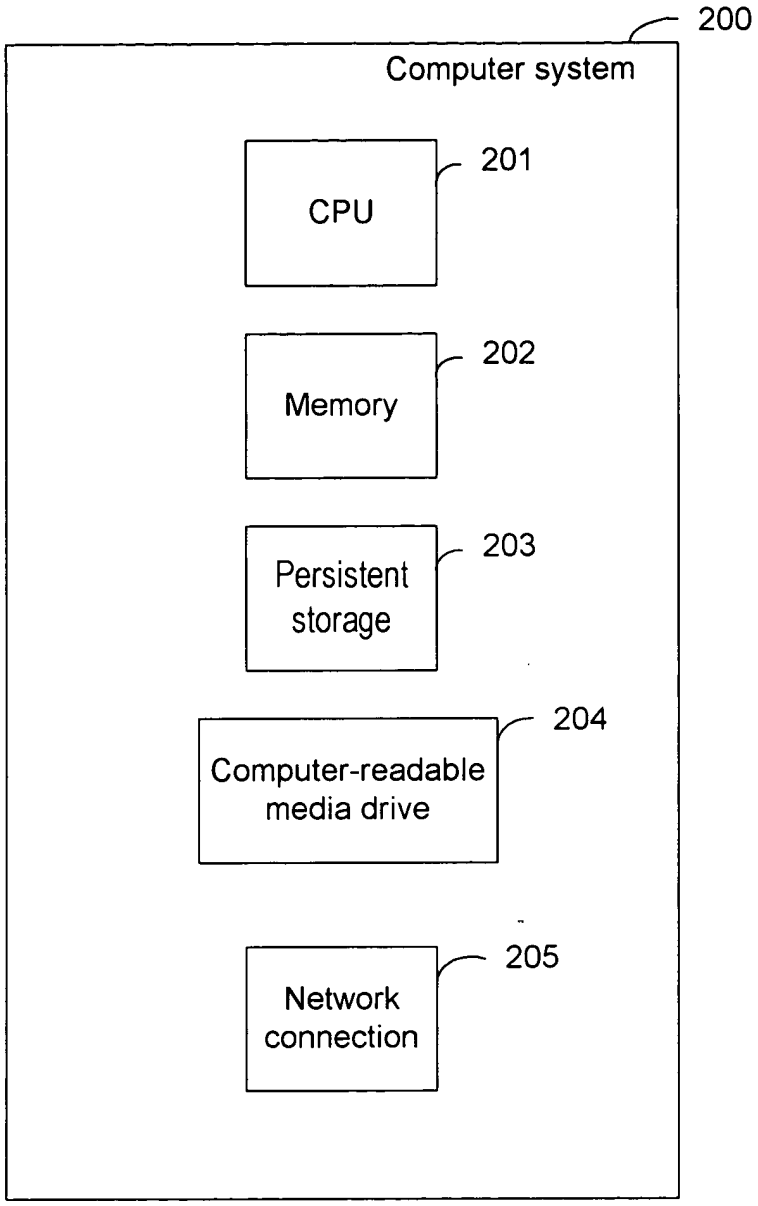
200
Computer system
CPU
201
Memory
202
Persistent storage
203
Computer-readable media drive
204
Network connection
205

FIG. 2

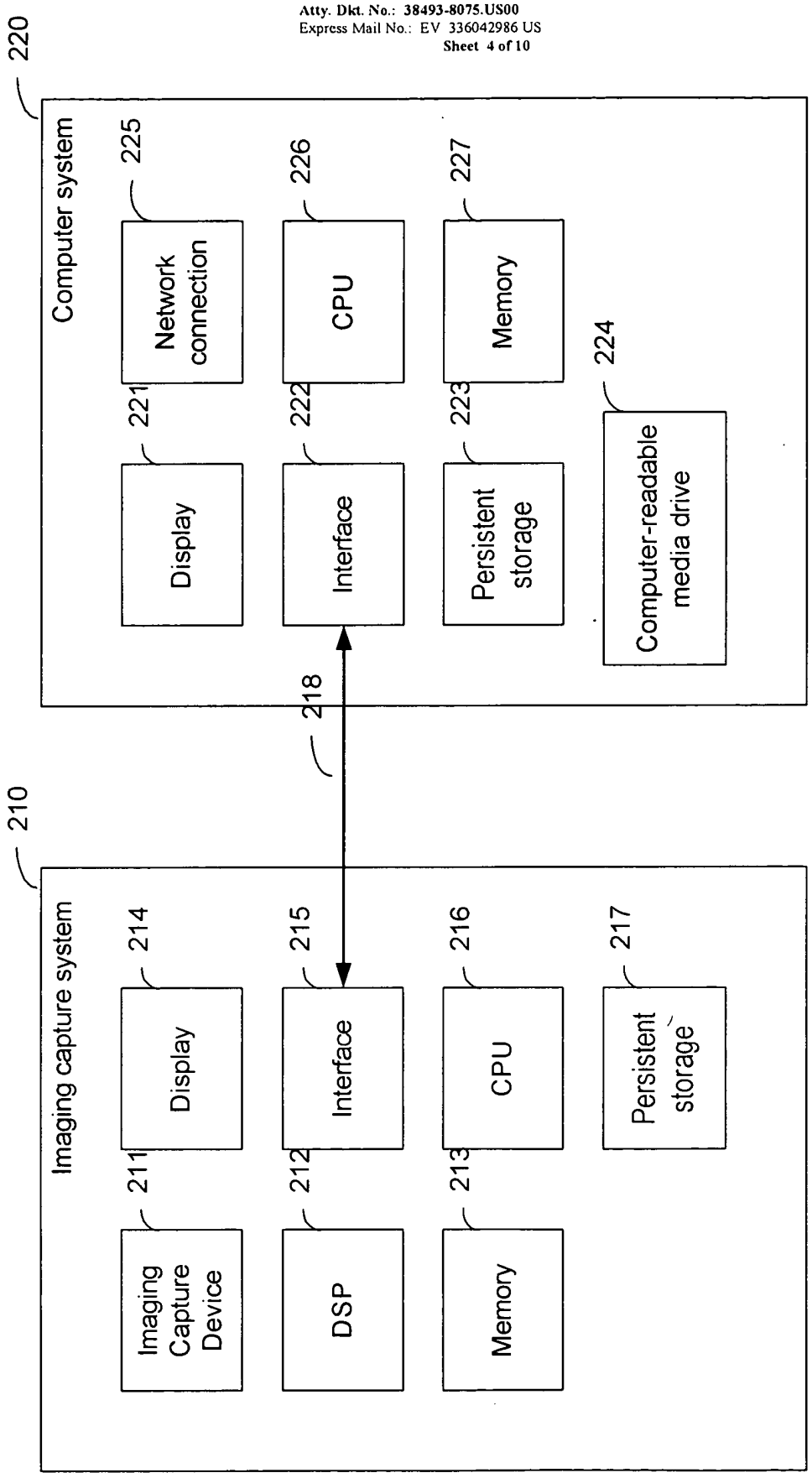
220
Computer system
225
Network connection
226
CPU
227
Memory
224
221
Display
222
Interface
223
Persistent storage
Computer-readable media drive
218
210
Imaging capture system
214
Display
215
Interface
216
CPU
217
Persistent storage
211
Imaging Capture Device
212
DSP
213
Memory

FIG. 2A

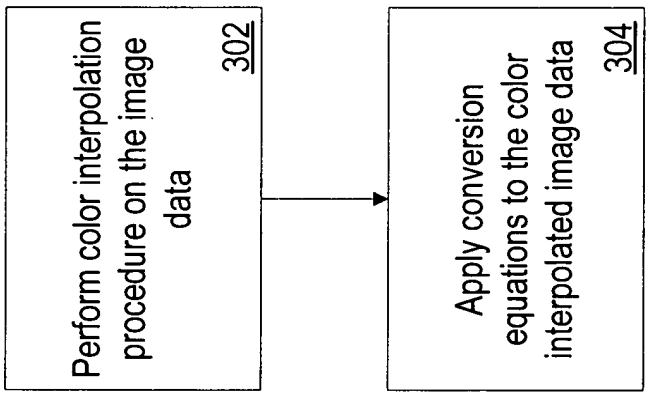
Perform color interpolation procedure on the image data
302
Apply conversion equations to the color interpolated image data
304

FIG. 3

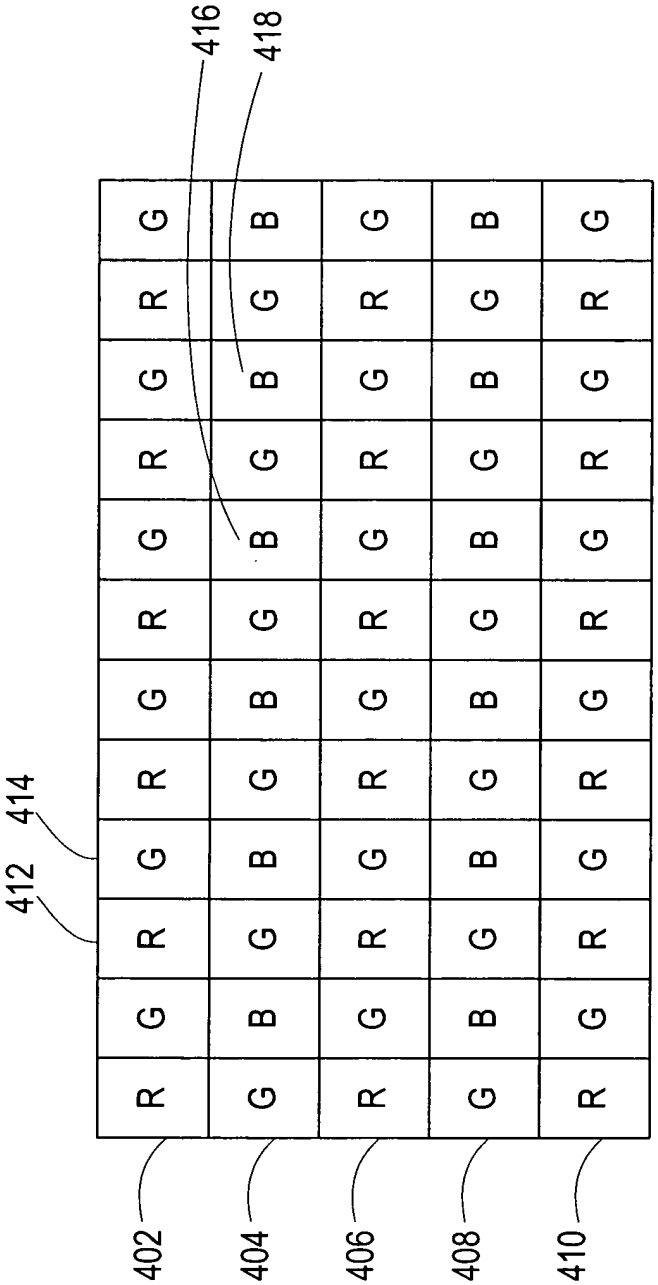
416
418
414
412
G R G R G R G R G R
B G B G B G B G B G
G R G R G R G R G R
B G B G B G B G B G
G R G R G R G R G R
B G B G B G B G B G
G R G R G R G R G R
B G B G B G B G B G
R G R G R G R G R G
402
404
406
408
410

FIG. 4

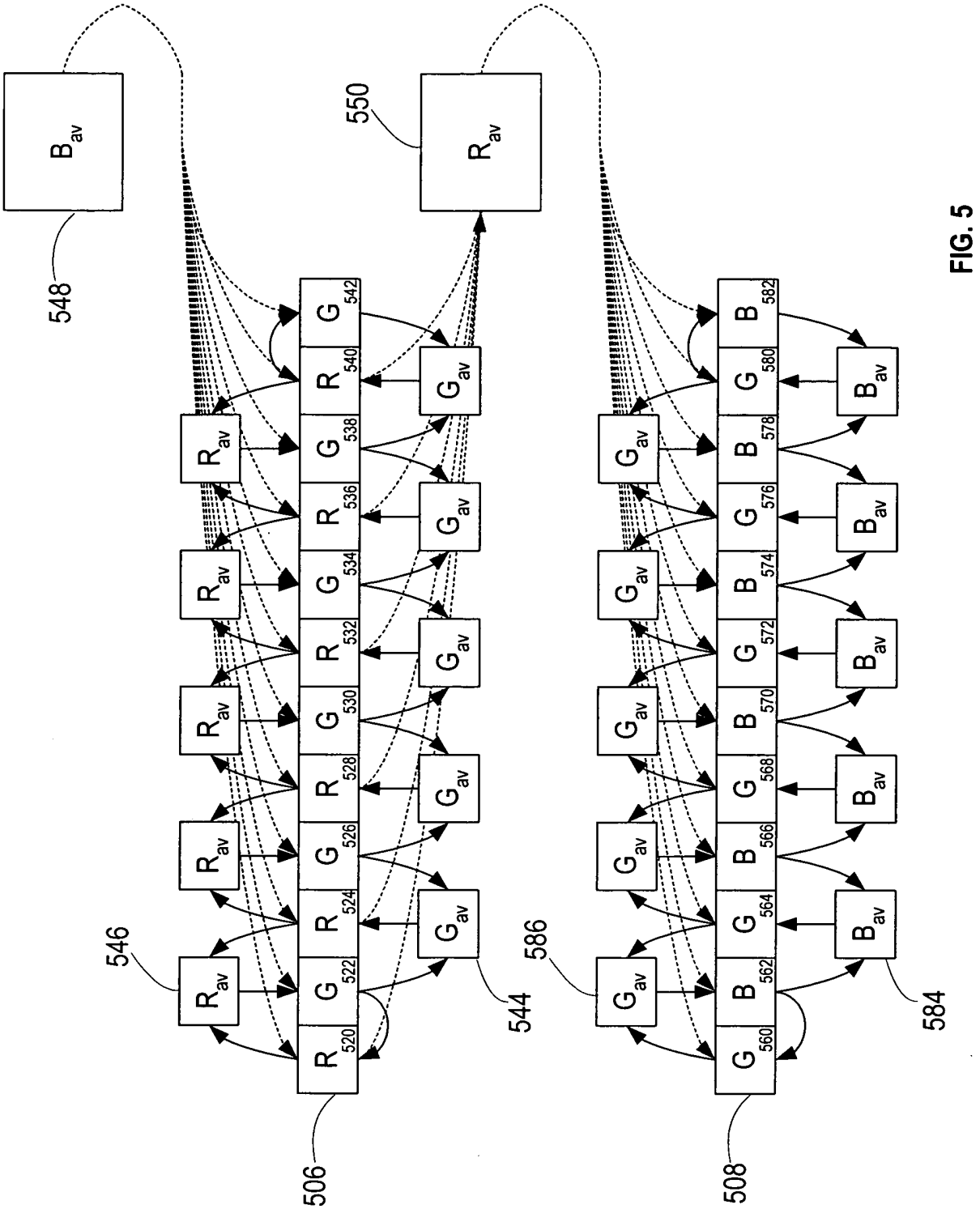
548
550
546
586
544
584
506
508
B_{av}
R_{av}
G_{av}
R 520
G 522
R 524
G 526
R 528
G 530
R 532
G 534
R 536
G 538
R 540
G 542
B 560
G 562
B 564
G 566
B 568
G 570
B 572
G 574
B 576
G 578
B 580
G 582

FIG. 5

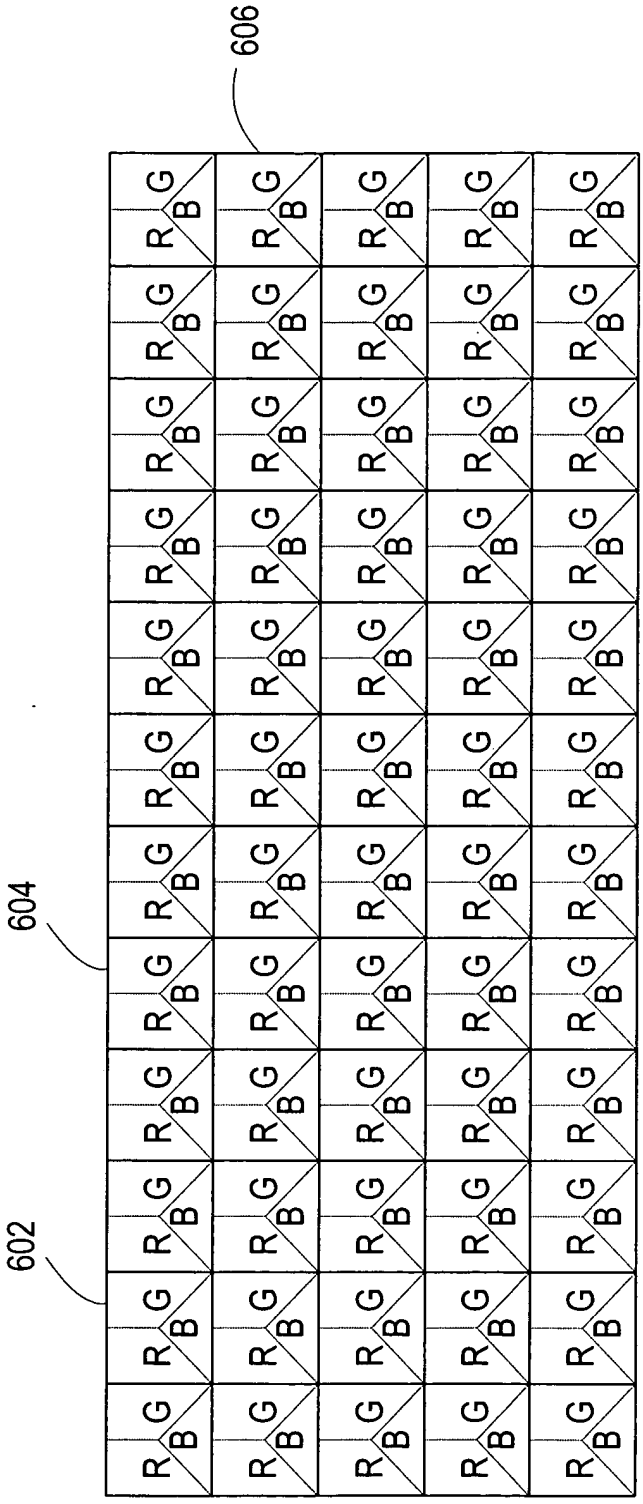

FIG. 6

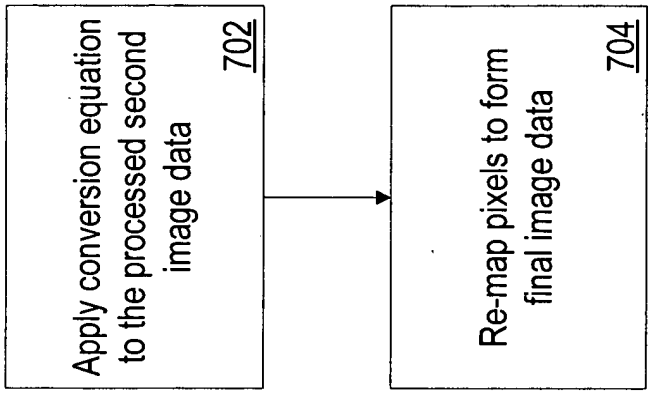
Apply conversion equation to the processed second image data
702
Re-map pixels to form final image data
704

FIG. 7

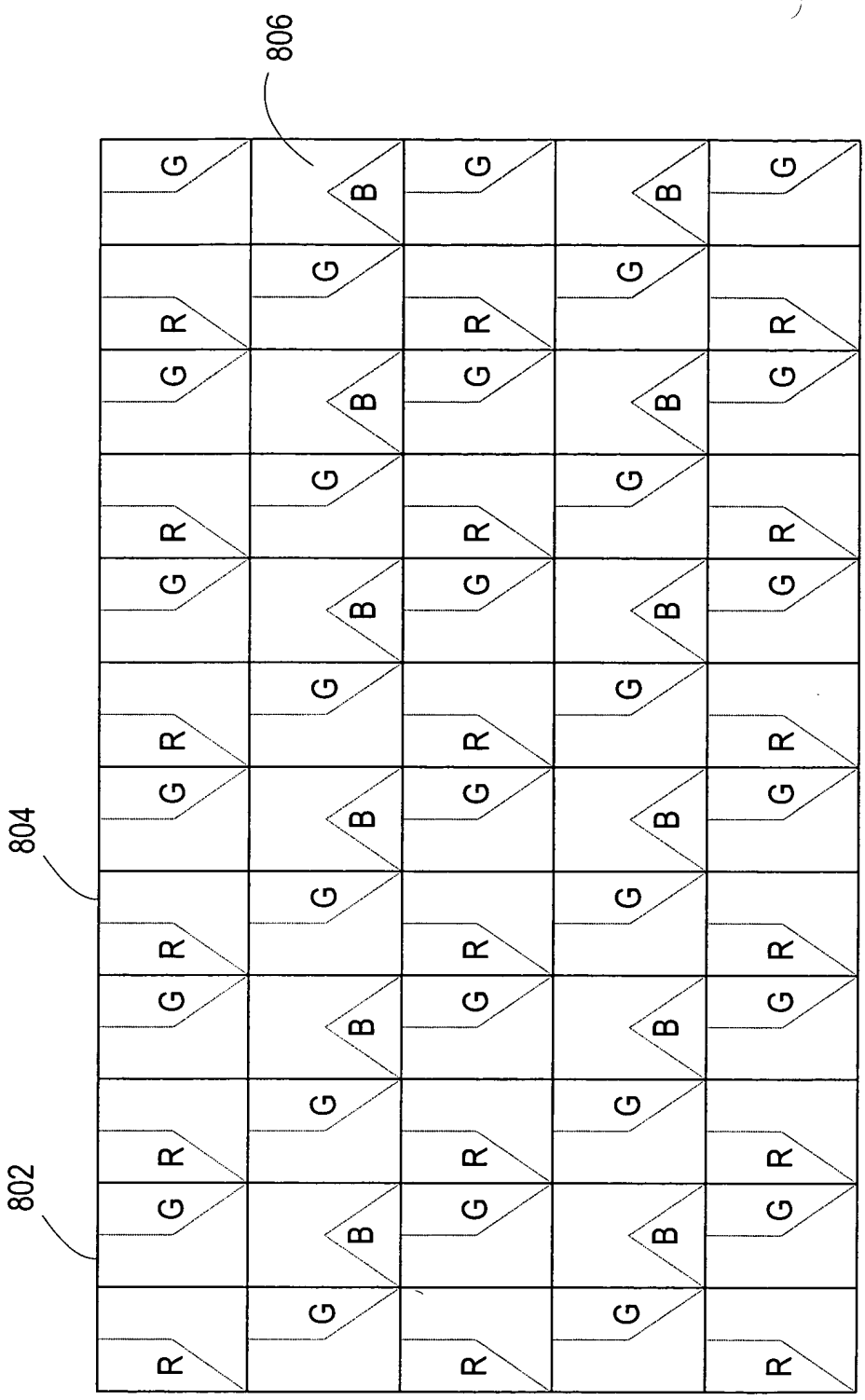

FIG. 8